



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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---

Frank O'Bannon  
Governor

Lori F. Kaplan  
Commissioner

100 North Senate Avenue  
P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
[www.IN.gov/idem](http://www.IN.gov/idem)

April 8, 2003

Tim Boncher  
Richmond Liner Foundry and Machining Plant, Perfect Circle Division, Dana Corporation  
P.O. Box 1446  
Richmond, IN 47375

Re: **177-16144**  
**First Minor Permit Modification to**  
**Part 70 No.: T 177-6887-00090**

Dear Mr. Boncher:

Richmond Liner Foundry and Machining Plant, Perfect Circle Division, Dana Corporation was issued a permit on June 28, 2002 for a stationary grey and ductile iron sleeve casting and machining source. Letters requesting changes to this permit were received on September 23 and October 15, 2002. Pursuant to the provisions of 326 IAC 2-7-12 a minor permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of adding a baghouse with bag leak detection to the existing electric charge handling operation. Overall HAPs limitations have been incorporated in order to render the requirements of Section 112(j) of the Clean Air Act not applicable.

The changes in the Part 70 Operating Permit are documented in the Technical Support Document. All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire Title V Operating Permit, with all modifications and/or amendments made to it, is being provided.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Mark L. Kramer, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 ext. 12 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,  
Signed by

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments  
MLK/MES

cc: File - Wayne County  
U.S. EPA, Region V  
Wayne County Health Department  
Air Compliance Section Inspector - Richard Sekula  
Compliance Branch - Karen Nowak  
Administrative and Development - Lisa Lawrence  
Technical Support and Modeling - Michelle Boner



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## PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Richmond Liner Foundry and Machining Plant, Perfect Circle Division,  
Dana Corporation  
2153 and 2175 Williamsburg Pike  
Richmond, Indiana 47375**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 177-6887-00090	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: June 28, 2002

First Administrative Amendment No.: AT 177-16429-00090, issued on October 21, 2002

First Minor Permit Modification  MPM 177-16144-00090	Conditions Affected: A.1, A.3, A.4, D.3, D.3.1, D.3.3, D.3.5, D.3.7, D.3.9, D.3.10, D.3.12 and added D.5 and D.5.1
Issued by: Signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:  April 8, 2003

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1, A.3 and A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

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The Permittee owns and operates a stationary grey and ductile iron sleeve casting and machining source, consisting of two (2) plants designated as Plants 1 and 2.

Responsible Official:	Tim Boncher, or the person holding the title of Plant Manager or the Richmond Machine Plant Manager or the acting Richmond Machine Plant Manager
Source Address:	2153 and 2175 Williamsburg Pike, Richmond, Indiana 47375
Mailing Address:	P.O. Box 1446, Richmond, Indiana 47375
General Source Phone Number:	317-935-7800
SIC Code:	3321, 3398 and 3592
County Location:	Wayne
Source Location Status:	
Attainment for all criteria pollutants	
Source Status:	Part 70 Permit Program Major Source, under PSD rules Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

### A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

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This stationary iron sleeve casting and machining source consists of two (2) plants:

- (a) Plant 1 is located at 2153 Williamsburg Pike; Richmond, Indiana (177-00004), and
- (b) Plant 2 is located at 2175 Williamsburg Pike, Richmond, Indiana (177-00013).

Since the two (2) plants are located on contiguous or adjacent properties, belong to the same industrial grouping, and under common control of the same entity, they were considered one (1) source in MSM 177-11453-00090, issued on November 17, 1999.

### A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (a) Two (2) alternating cupolas, known as Unit ID 010, (only one (1) operates at a time) installed in 1960, each equipped with a venturi scrubber system, known as Unit ID VS#10, consisting of two (2) natural gas-fired afterburners with propane as a back-up fuel for CO control, rated at 8.0 million British thermal units per hour, each, one (1) quencher tank, one (1) venturi scrubber and demister, exhausted through Stack 010, capacity: 12.8 tons of metal per hour, each.
- (b) Three (3) electric induction melting furnaces (#2, #3, and #4), known as Unit ID 020, equipped with a baghouse, known as Unit ID DC#13, exhausted through Stack 013 or exhausted by overhead fans through Stacks 020 and 070, general exhausts, installed in 1972, capacity: 3.5 tons of metal per hour, each (baghouse does not have to be operated at all times).

- (c) One (1) electric induction melting furnace (#1), known as Unit ID 021, installed in 1996, equipped with a baghouse, known as Unit ID DC#13, exhausted through Stack 013, capacity: 4.8 tons of metal per hour (baghouse does not have to be operated at all times).
- (d) Seven (7) electric holding furnaces (40 ton and Group 3 through Group 8 electric holding furnaces) and hot metal transfer ladles, known as Unit ID 030, installed in 1960, exhausted through Stack 030, charging capacity: 23.3 tons of metal per hour, total.
- (e) One (1) electric holding furnace (1996) and hot metal transfer ladles, known as Unit ID 031, exhausted through Stack 031, installed in 1996, capacity: charging 4.8 tons of metal per hour.
- (f) One (1) natural gas indirect-fired burner using propane as a back-up fuel supplying hot blast air to cupola, known as Unit ID 040, exhausted through Stack 040, installed in 1999, capacity: 14.0 million British thermal units per hour.
- (g) One (1) tundish ladle for Group 3 spinner machines and two (2) back-up tundish ladles for magnesium inoculation, known as Unit ID 050, exhausted through vent Stack 050a and through roof ventilation Stack 050b, installed in 1960, capacity: 4 tons of iron treated per hour.
- (h) One (1) cupola charge handling operation, known as Unit ID 060, exhausted through Stack 060, installed in 1960, capacity: 12.8 tons of metal per hour.
- (i) One (1) electric furnace charge handling operation, known as Unit ID 070, installed in 1972, equipped with a baghouse, known as DC#14, with a leak detection system, installed in 2002, exhausted through Stack 070a, capacity: 10 tons of metal per hour.
- (j) One (1) direct-fired scrap charge pre-heater, known as Unit ID 080, equipped with a baghouse, known as Unit ID DC#13, exhausted through Stack 13, installed in 1972, capacity: 10 tons of metal per hour (baghouse does not have to be operated at all times).
- (k) Seven (7) centrifugal casting operations, known as Unit ID 090, consisting of three (3) long tube spinners (Group 1), thirty-three (33) regular spinners (Groups 3 through Group 6 and Group 8), equipped with six (6) baghouses, known as DC#1, DC#2A, DC#3, DC#4, and DC#7 & DC#8, exhausting through Stacks 090h, 090g, 090a, 090b, and 090e & 090f, respectively, and one (1) rotary turntable (Group 7), equipped with two (2) baghouses, known as DC#5 & DC#6, exhausting through Stacks 090c and 090d, installed in 1960, capacity: 40 tons of metal per hour, total.
- (l) One (1) longtube 92-inch centrifugal casting machine (spinner #18) (Group 1), known as Unit ID 090, equipped with a baghouse, known as DC#1, exhausting through Stack 090h, installed in 2001, capacity: 1.70 tons of metal per hour.
- (m) Four (4) longtube 60-inch centrifugal casting machines (spinners #41, #43, #45, and #47) (Group 4), Unit ID 090, equipped with a baghouse, known as DC#3, exhausting through Stack 090a, installed in 2001, capacity: 1.11 tons of metal per hour each.
- (n) Three (3) shot blasters, capacity: 30 tons of metal cleaned per hour, total, consisting of:
  - (1) One (1) shot blaster [one (1) hanging conveyorized (cleaning mill #1)], known as Unit ID 100, equipped with a baghouse, known as DC#2, equipped with a bag leak detection system, exhausted through Stack 100a, installed prior to 1969.
  - (2) Two (2) rotoblaster (cleaning mill #3 and #5), known as Unit ID 100, equipped with interchangeable baghouses, known as DC#10 and DC#9, each equipped with a bag

leak detection system, exhausted through Stacks 100b and 100c, installed in 1968 and 1978, respectively.

- (o) One (1) pangborn ES-2029-1\S000203 rotoblast cabinet (cleaning mill #7), known as Unit ID 100, equipped with an interchangeable baghouse, known as DC#10 or DC#9, each equipped with a bag leak detection system, exhausting through Stack 100b or 100c, installed in 2001, capacity: 13.0 tons of metal per hour, blast rate 80.75 tons of cast steel shot per hour.

A.4 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities as defined in 326 IAC 2-7-1 (21).

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. (326 IAC 8-3-2 and 326 IAC 8-3-5)
- (b) Any of the following structural steel and bridge fabrication activities: Cutting 200,000 linear feet or less of one inch (1") plate or equivalent; using 80 tons or less of welding consumables. (326 IAC 6-1)
- (c) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone. (326 IAC 6-1)
- (d) Conveyors as follows: Covered conveyors for coal or coke conveying of less than or equal to 360 tons per day; Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983. (326 IAC 6-1)
- (e) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; and pneumatic conveying operations including the following:
  - One (1) wet liner machining lathing operation controlled by a baghouse dust collector with a gas flow rate of 2,000 actual cubic feet per minute. (326 IAC 6-1)
- (f) Iron manganese phosphating operation (Lubrite). (326 IAC 6-1)
- (g) One (1) CNC lathe machining operation, equipped with a baghouse, known as DC#12. (326 IAC 6-1)
- (h) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.
- (i) Propane for liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.
- (j) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 British thermal units per hour.
- (k) Combustion source flame safety purging on startup.
- (l) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per

month.

- (m) The following VOC and HAP storage containers: Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons; vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (n) Refractory storage not requiring air pollution control equipment.
- (o) Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings.
- (p) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (q) Closed loop heating and cooling systems.
- (r) Groundwater oil recovery wells.
- (s) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1 percent by volume.
- (t) Any operation using aqueous solutions containing less than 1 percent by weight of VOCs excluding HAPs.
- (u) Noncontact cooling tower systems with the following: Forced and induced draft cooling tower system not regulated under a NESHAP.
- (v) Quenching operations used with heat treating processes.
- (w) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (x) Heat exchanger cleaning and repair.
- (y) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.
- (z) Paved and unpaved roads and parking lots with public access.
- (aa) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (bb) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (cc) Furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches by volume.
- (dd) On-site fire and emergency response training approved by the department.
- (ee) Emergency generators as follows: Diesel generators not exceeding 1,600 horsepower.
- (ff) Purge double block and bleed valves.
- (gg) Mold release agents using low volatile products (vapor pressure less than or equal to 2

kiloPascals measured at 38EC).

- (hh) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (ii) Heat treat furnaces and quenching operations; groundwater remediation air stripper; zinc phosphate coating operation; honing washer and honing stone/glue preheater; molybdenum coating spray and blast; parts cleaners - maintenance degreasing; paved roadways; unpaved roadways; storage piles (raw material and solid waste); solid waste landfill; on-site remediation activities.
- (jj) Mold release spray mixing area below 5 pounds per hour and 25 pounds per day of particulate matter.

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## SECTION B

## GENERAL CONDITIONS

### B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

### B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

### B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

### B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

### B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

### B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]
- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

**B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]**

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
- (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) Noncompliance with any provisions of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.
- (c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

**B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]**

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

**B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]**

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on

the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
  - (2) The compliance status;
  - (3) Whether compliance was continuous or intermittent;
  - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
  - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]  
[326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) for the cupolas when operation is restarted, and for other specified emission units within ninety (90) days after issuance of this permit, including the following information on each facility.
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance required by the PMP shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

**B.12 Emergency Provisions [326 IAC 2-7-16]**

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

**B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]**

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.

Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
- (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]

**B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

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- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
- (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted
- by this permit.
- (b) All previous registrations and permits are superseded by this permit.

**B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]**

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- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the

applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

**B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]**

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

**B.17 Permit Renewal [326 IAC 2-7-4]**

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]**

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- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

**B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]**

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015  
  
and  
  
United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590  
  
in advance of the change by written notification at least ten (10) days in advance copy of this permit; and
  - (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20 (b), (c), or (e) and makes such records available, upon reasonable request, for public review.  
  
Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).
- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC

2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy any records that must be kept under the conditions of this permit;
- (c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]**

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source
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### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

#### C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

#### C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

#### C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

#### C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

#### C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

## Testing Requirements [326 IAC 2-7-6(1)]

### C.8 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63,

40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

#### **Compliance Requirements [326 IAC 2-1.1-11]**

##### **C.9 Compliance Requirements [326 IAC 2-1.1-11]**

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### **Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

##### **C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

Richmond Liner Foundry and Machining Plant,  
Perfect Circle Division, Dana Corporation  
Richmond, Indiana  
Permit Reviewer: MLK/MES

First Minor Permit Modification  
177-16144-00090  
Amended by: MES

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**C.11 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals as required in Section D until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

**C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

**C.13 Pressure Gauge and Other Instrument Specifications [326 IAC. 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a temperature or flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ( $\pm 2\%$ ) of full scale reading.
- (c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.
- (d) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

**Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

**C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on September 14, 1996.
- (b) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (c) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP

for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared and implemented for the cupolas within ninety (90) days of when operation of the cupolas is restarted, and for other specified emission units shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
  - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
  - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall constitute a deviation of the permit.

- (c) The Permittee is not required to take any further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

**C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]**

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement

shall meet the following requirements:

- (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
  - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified

mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

### **Stratospheric Ozone Protection**

#### **C.21 Compliance with 40 CFR 82 and 326 IAC 22-1**

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (a) Two (2) alternating cupolas, known as Unit ID 010, (only one (1) operates at a time) installed in 1960, each equipped with a venturi scrubber system, known as Unit ID VS#10, consisting of two (2) natural gas-fired afterburners with propane as a back-up fuel for CO control, rated at 8.0 million British thermal units per hour, each, one (1) quencher tank, one (1) venturi scrubber and demister, exhausted through Stack 010, capacity: 12.8 tons of metal per hour, each.
- (b) Three (3) electric induction melting furnaces (#2, #3, and #4), known as Unit ID 020, equipped with a baghouse, known as Unit ID DC#13, exhausted through Stack 013 or exhausted by overhead fans through Stacks 020 and 070, general exhausts, installed in 1972, capacity: 3.5 tons of metal per hour, each (baghouse does not have to be operated at all times).
- (c) One (1) electric induction melting furnace (#1), known as Unit ID 021, installed in 1996, equipped with a baghouse, known as Unit ID DC#13, exhausted through Stack 013, capacity: 4.8 tons of metal per hour (baghouse does not have to be operated at all times).
- (d) Seven (7) electric holding furnaces (40 ton and Group 3 through Group 8 electric holding furnaces) and hot metal transfer ladles, known as Unit ID 030, installed in 1960, exhausted through Stack 030, charging capacity: 23.3 tons of metal per hour, total.
- (e) One (1) electric holding furnace (1996) and hot metal transfer ladles, known as Unit ID 031, exhausted through Stack 031, installed in 1996, capacity: charging 4.8 tons of metal per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 Particulate Matter (PM) [326 IAC 6-1-14]

Pursuant to 326 IAC 6-1-14 (Nonattainment area particulate limitations: Wayne County), the allowable PM emission rate from the two (2) cupolas (Unit ID 010) shall not exceed:

- (a) 0.133 grains per dry standard cubic foot of outlet air, and
- (b) 51.5 tons per year.

#### D.1.2 Particulate Matter (PM) [326 IAC 6-1]

- (a) Pursuant to 326 IAC 6-1-2(e)(2), the particulate matter (PM) emissions from the three (3) electric induction melting furnaces (Unit ID 020) shall not exceed 0.07 grains per dry standard cubic foot for Stack 013, equivalent to 11.5 pounds per hour at a flow rate of 19,243 dry standard cubic feet per minute, each.
- (b) Pursuant to 326 IAC 6-1-2(e)(2), the particulate matter (PM) emissions from the electric induction melting furnace (Unit ID 021) shall not exceed 0.07 grains per dry standard cubic foot, equivalent to 11.5 pounds per hour at a flow rate of 19,243 dry standard cubic feet per minute.
- (c) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the seven (7) electric holding furnaces (Unit ID 030) shall not exceed 0.03 grains per dry standard cubic foot, total, equivalent to 4.98 pounds per hour at a flow rate of 19,356 dry standard cubic

feet per minute.

- (d) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the electric holding furnace (Unit ID 031) shall not exceed 0.03 grains per dry standard cubic foot, equivalent to 1.00 pound per hour at a flow rate of 3,905 dry standard cubic feet per minute.

**D.1.3 PM<sub>10</sub> [326 IAC 2-2]**

- (a) The PM<sub>10</sub> emissions from the electric induction melting furnace (Unit ID 021) shall not exceed 4.128 pounds per hour, and
- (b) The input of grey iron to the electric induction melting furnace (Unit ID 021) shall be limited to 31,392 tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 2-2 are not applicable.
- (c) The requirement from CP 177-6425-00004 issued November 12, 1996, Condition 7 that stated that the input of grey iron to the electric induction melting furnace (Unit ID 021) shall be limited to 2,616 tons per month pursuant to 326 IAC 2-2 has been replaced by a twelve (12) consecutive month period limit. Therefore, Condition 7 of CP 177-6425 is hereby rescinded.

**D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the two (2) cupolas and their control devices.

**Compliance Determination Requirements**

**D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

Within 180 days of when operation of the cupolas is restarted or within two and a half (2.5) years of the last valid stack test, whichever is later, in order to demonstrate compliance with Condition D.1.1, the Permittee shall perform PM testing of the exhaust stack serving the two (2) cupolas (Stack 010) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2.5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

**D.1.6 Particulate Matter (PM)**

In order to comply with Condition D.1.1, the venturi scrubber system, known as Unit ID VS#10, consisting of two (2) afterburners for CO, one (1) quencher tank, one (1) venturi scrubber and demister for PM control shall be in operation at all times when either of the two (2) cupolas are in operation and exhausting to the outside atmosphere.

**Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

**D.1.7 Visible Emissions and Turbidity Notations**

- (a) Visible emission notations of the cupola stack exhaust (Stack 010) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) In lieu of performing visible emissions notations of the four (4) electric induction furnaces exhaust, the Permittee may operate a baghouse to control emissions from the four (4) electric induction furnaces. Visible emission notations of the four (4) electric induction furnaces exhaust (Stacks 020 and 070, general exhausts) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere if the baghouse, known as DC#13 is *not* operating. A trained employee shall record whether emissions are normal or abnormal.

- (c) Visible observations of the charge doors for smoke emissions shall be performed once per shift. A trained employee shall record whether emissions are normal or abnormal.
- (d) Turbidity observations of the scrubber water shall be performed once per work day. A trained employee shall record whether observations are normal or abnormal.
- (e) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (f) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (g) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (h) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. An observation of an abnormal visible emission notation or turbidity observation is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.

#### D.1.8 Afterburners Parametric Monitoring

- (a) When operation of the cupolas is restarted, a continuous monitoring system shall be calibrated, maintained, and operated on the two (2) afterburners for measuring operating temperature. The output of this system shall be recorded continuously with ninety (90) days of when operation of the cupolas is restarted, and that temperature shall be greater than or equal to the normal temperature used to demonstrate compliance during the most recent compliance stack test, or the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A temperature reading that is outside the normal range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.
- (b) The instruments used for determining the temperature shall comply with Section C - Pressure Gauge Specifications and Other Instruments, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every twelve (12) months.

#### D.1.9 Scrubber Parametric Monitoring

- (a) The Permittee shall record the total static pressure drop across the venturi scrubber used in conjunction with the two (2) alternating cupolas, known as Unit ID 010, (only one (1) operates at a time) at least once per shift when either of the cupolas is in operation when venting to the atmosphere. When for any one (1) reading, the pressure drop across the scrubber is below a minimum of 20.0 inches of water or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is less than the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.

- (b) The fan speed and/or motor amperage shall be observed at least once per work day when the two (2) afterburners are in operation. When for any one (1) reading, the fan speed and/or motor amperage are outside the normal range or the range of fan speeds and/or motor amperages established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan- Preparation, Implementation, Records, and Reports. A fan speed and/or motor amperage reading that is outside the normal range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.
- (c) The instrument used for determining the pressure, fan speed and motor amperage shall comply with Section C - Pressure Gauge Specifications and Other Instruments, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every twelve (12) months.

#### D.1.10 pH of the Scrubbing Liquor

The Permittee shall record the pH of the scrubbing liquor used in conjunction with the two (2) alternating cupolas, known as Unit ID 010, (only one (1) operates at a time) at least once per shift when the cupola is in operation when venting to the atmosphere. When for any one (1) reading, the pH is outside the normal range of 6.5 and 9.0 or the range of pH established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pH reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.

The instrument used for determining the pH shall comply with Section C - Pressure Gauge Specifications and Other Instruments, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every twelve (12) months.

#### D.1.11 Venturi Scrubber Flow Rate

The Permittee shall continuously record the scrubbing liquor (water) flow rate across the venturi scrubber controlling the cupola when the cupola is in operation. When for any one (1) reading, the flow rate for the scrubbing liquor shall be no less than a minimum of 75 gallons of water per minute or a minimum flow rate established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A flow rate reading that is less than the minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.

The instrument used for determining the flow rate shall comply with Section C - Pressure Gauge Specifications and Other Instruments, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every twelve (12) months.

#### D.1.12 Scrubber and Demister Inspection

An inspection shall be performed each calendar quarter of the scrubber and demister. Defective scrubber and/or demister part(s) shall be replaced. A record shall be kept of the results of the inspection.

#### D.1.13 Failure Detection

In the event that a scrubber and/or demister failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

## **Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

### **D.1.14 Record Keeping Requirements**

- (a) To document compliance with Condition D.1.7(a), the Permittee shall maintain records of visible emission notations of the cupola stack exhaust once per shift.
- (b) To document compliance with Conditions D.1.2(a), D.1.2(b) and D.1.7(b), the Permittee shall maintain records of visible emission notations of the four (4) electric induction furnaces stack exhaust once per shift or maintain records documenting the operation of a baghouse for the four (4) electric induction furnaces exhaust.
- (c) To document compliance with Condition D.1.3, the Permittee shall maintain monthly records of grey iron input to the electric induction melting furnace (Unit ID 021).
- (d) To document compliance with Condition D.1.7(c), the Permittee shall maintain records of visible emissions of the charge doors once per shift.
- (e) To document compliance with Condition D.1.7(d), the Permittee shall maintain records of scrubber water turbidity once per work day.
- (f) To document compliance with Condition D.1.8, the Permittee shall maintain records of temperature of the afterburners continuously within ninety (90) days of when operation of the cupolas is restarted.
- (g) To document compliance with Condition D.1.9, the Permittee shall maintain records of pressure drop across the venturi scrubber once per shift and the fan speed and/or motor amperage once per work day.
- (h) To document compliance with Condition D.1.10, the Permittee shall maintain records of scrubber water pH once per shift.
- (i) To document compliance with Condition D.1.11, the Permittee shall maintain records of scrubber water flow rate continuously.
- (j) To document compliance with Condition D.1.12, the Permittee shall maintain records of the results of the inspections required under Condition D.1.12 and the dates the vents are re-directed.
- (k) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### **D.1.15 Reporting Requirements**

A quarterly summary of the monthly information to document compliance with the monthly furnace charge input limit in Condition D.1.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## SECTION D.2

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (f) One (1) natural gas indirect-fired burner using propane as a back-up fuel supplying hot blast air to cupola, known as Unit ID 040, exhausted through Stack 040, installed in 1999, capacity: 14.0 million British thermal units per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Particulate Matter (PM) [326 IAC 6-1]

Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the natural gas indirect-fired burner using propane as a back-up fuel supplying hot blast air to cupola (Unit ID 040) shall not exceed 0.03 grains per dry standard cubic foot, equivalent to 0.288 pounds per hour at a flow rate of 1,120 dry standard cubic feet per minute.

### Compliance Determination Requirements

#### D.2.2 Fuel Type

The burner shall only be fired with natural gas or propane as a back-up fuel.

### SECTION D.3

### FACILITY OPERATION CONDITIONS

#### Facility Description [326 IAC 2-7-5(15)]

- (g) One (1) tundish ladle for Group 3 spinner machines and two (2) back-up tundish ladles for magnesium inoculation, known as Unit ID 050, exhausted through vent Stack 050a and through roof ventilation Stack 050b, installed in 1960, capacity: 4 tons of iron treated per hour.
- (h) One (1) cupola charge handling operation, known as Unit ID 060, exhausted through Stack 060, installed in 1960, capacity: 12.8 tons of metal per hour.
- (i) One (1) electric furnace charge handling operation, known as Unit ID 070, installed in 1972, equipped with a baghouse, known as DC#14, with a leak detection system, installed in 2002, exhausted through Stack 070a, capacity: 10 tons of metal per hour.
- (j) One (1) direct-fired scrap charge pre-heater, known as Unit ID 080, equipped with a baghouse, known as Unit ID DC#13, exhausted through Stack 13, installed in 1972, capacity: 10 tons of metal per hour (baghouse does not have to be operated at all times).
- (k) Seven (7) centrifugal casting operations, known as Unit ID 090, consisting of three (3) long tube spinners (Group 1), thirty-three (33) regular spinners (Groups 3 through Group 6 and Group 8), equipped with six (6) baghouses, known as DC#1, DC#2A, DC#3, DC#4, and DC#7 & DC#8, exhausting through Stacks 090h, 090g, 090a, 090b, and 090e & 090f, respectively, and one (1) rotary turntable (Group 7), equipped with two (2) baghouses, known as DC#5 & DC#6, exhausting through Stacks 090c and 090d, installed in 1960, capacity: 40 tons of metal per hour, total.
- (l) One (1) longtube 92-inch centrifugal casting machine (spinner #18) (Group 1), known as Unit ID 090, equipped with a baghouse, known as DC#1, exhausting through Stack 090h, installed in 2001, capacity: 1.70 tons of metal per hour.
- (m) Four (4) longtube 60-inch centrifugal casting machines (spinners #41, #43, #45, and #47) (Group 4), Unit ID 090, equipped with a baghouse, known as DC#3, exhausting through Stack 090a, installed in 2001, capacity: 1.11 tons of metal per hour each.
- (n) Three (3) shot blasters, capacity: 30 tons of metal cleaned per hour, total, consisting of:
  - (1) One (1) shot blaster [one (1) hanging conveyorized (cleaning mill #1)], known as Unit ID 100, equipped with a baghouse, known as DC#2, equipped with a bag leak detection system, exhausted through Stack 100a, installed prior to 1969.
  - (2) Two (2) rotoblaster (cleaning mill #3 and #5), known as Unit ID 100, equipped with interchangeable baghouses, known as DC#10 and DC#9, each equipped with a bag leak detection system, exhausted through Stacks 100b and 100c, installed in 1968 and 1978, respectively.
- (o) One (1) pangborn ES-2029-1\S000203 rotoblast cabinet (cleaning mill #7), known as Unit ID 100, equipped with an interchangeable baghouse, known as DC#10 or DC#9, each equipped with a bag leak detection system, exhausting through Stack 100b or 100c, installed in 2001, capacity: 13.0 tons of metal per hour, blast rate 80.75 tons of cast steel shot per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

## Emission Limitations and Standards [326 IAC 2-7-5(1)]

### D.3.1 Particulate Matter (PM) [326 IAC 6-1]

- (a) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the one (1) tundish ladle for Group 3 spinner machines and two (2) back-up tundish ladles for magnesium inoculation (Unit ID 050) shall not exceed 0.03 grains per dry standard cubic foot equivalent to 0.742 pounds per hour total at a flow rate of 2,886 dry standard cubic feet per minute for Stack 050a.
- (b) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the one (1) tundish ladle for Group 3 spinner machines and two (2) back-up tundish ladles for magnesium inoculation (Unit ID 050) shall not exceed 0.03 grains per dry standard cubic foot equivalent to 10.4 pounds per hour total at a flow rate of 40,410 dry standard cubic feet per minute for Stack 050b.
- (c) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the one (1) cupola charge handling operation (Unit ID 060) shall not exceed 0.03 grains per dry standard cubic foot, equivalent to 4.95 pounds per hour at a flow rate of 19,243 dry standard cubic feet per minute.
- (d) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from one (1) electric furnace charge handling operation (Unit ID 070) shall not exceed 0.03 grains per dry standard cubic foot, equivalent to 15.4 pounds per hour at a flow rate of 59,870 dry standard cubic feet per minute.
- (e) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the direct-fired scrap charge pre-heater (Unit ID 080) shall not exceed 0.03 grains per dry standard cubic foot, equivalent to 4.38 pounds per hour at a flow rate of 17,035 dry standard cubic feet per minute.
- (f) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the twelve (12) centrifugal casting operations (Unit ID 090) consisting of four (4) long tube spinners (Group 1), thirty-three (33) regular spinners (Groups 3 through Group 6 and Group 8) and four (4) long tube spinners (Group 4) and one (1) rotary turntable (Group 7), shall not exceed 0.03 grains per dry standard cubic foot each for Stacks 090a through 090h, equivalent to 4.77, 0.835, 0.740, 0.740, 0.835, 0.740, 0.740 and 0.883 pounds per hour at flow rates of 18,555, 3,247, 2,876, 2,876, 3,247, 2,876, 2,876 and 3,433 dry standard cubic feet per minute for Stacks 090a through 090h, respectively.
- (g) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the four (4) shot blasters [one (1) hanging conveyorized (cleaning mill #1) and three (3) rotoblaster (cleaning mills #3, #5 and #7)] (Unit ID 100) shall not exceed 0.03 grains per dry standard cubic foot, each, equivalent to:
  - (1) 3.96 pounds per hour at a flow rate of 15,394 dry standard cubic feet per minute each for Stacks 100a and 100b, and
  - (2) 1.98 pounds per hour at a flow rate of 7,697 dry standard cubic feet per minute for Stack 100c.

### D.3.2 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

- (a) The PM emissions from any two (2) of the three (3) cleaning mills #3, #5 or #7 exhausted through Stack 100b shall not exceed 5.71 pounds of PM per hour.
- (b) The PM<sub>10</sub> emissions from any two (2) of the three (3) cleaning mills #3, #5 or #7 exhausted

through Stack 100b shall not exceed 3.42 pounds of PM<sub>10</sub> per hour.

- (c) The PM emissions from the two (2) rotoblasts (cleaning mill #3 and #5) exhausted through Stack 100c shall not exceed 5.71 pounds of PM per hour.
- (d) The PM<sub>10</sub> emissions from the two (2) rotoblasts (cleaning mill #3 and #5) exhausted through Stack 100c shall not exceed 3.42 pounds of PM<sub>10</sub> per hour.
- (e) Cleaning mill #3 is not subject to any PM or PM<sub>10</sub> emission limits to render PSD not applicable when operated without cleaning mills #5 or #7 since cleaning mill #3 was installed in 1968 prior to applicability date of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

Compliance with the above PM and PM<sub>10</sub> emission limits renders the requirements of 326 IAC 2-2 not applicable.

#### **D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for baghouses DC#1, #2, #2A, #3, #4, #5, #6, #7, #8, #9, #10 and #14 associated with the twelve (12) centrifugal casting operations, known as Unit ID 090 and the four (4) shot blasters [one (1) hanging conveyORIZED (cleaning mill #1) and three (3) rotoblasts (cleaning mill #3, #5 and #7)], known as Unit ID 100, and the one (1) electric furnace charge handling operation, known as Unit ID 070.

### **Compliance Determination Requirements**

#### **D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

- (a) Within 36 months after issuance of this permit, in order to demonstrate compliance with Conditions D.3.1(g) and D.3.2, the Permittee shall perform PM and PM<sub>10</sub> testing of the exhaust stacks serving two (2) of the three (3) shot blasters (Stack 100a or b and c) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. Testing shall be conducted in accordance with Section C- Performance Testing.
- (b) To demonstrate compliance with Condition D.3.1(f), a compliance stack test of PM of cleaning mill #7 shall be performed between January 2006 and November 7, 2006, which corresponds to five (5) years since the latest valid stack test, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing. of cleaning mill #7 of utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.
- (c) Within 180 days of when operation of the tundish ladles is restarted, in order to demonstrate compliance with Condition D.3.1(a), the Permittee shall perform PM testing of the exhaust stack 050 serving the one (1) tundish ladle for Group 3 spinner machines and two (2) back-up tundish ladles for magnesium inoculation, known as Unit ID 050, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C- Performance Testing.

#### **D.3.5 Particulate Matter (PM)**

- (a) In order to comply with Condition D.3.1, the seven (7) baghouses, known as DC#1, DC#2A, DC#3, DC#4, and DC#7 & DC#8, two (2) baghouses, known as DC#5 & DC#6, and/or the

three (3) baghouses, known as DC#2, DC#10 and DC#9 as well as DC#14 for PM control shall be in operation at all times when the twelve (12) centrifugal casting operations, the one (1) rotary turntable (Group 7) and/or four (4) shot blasters [one (1) hanging conveyORIZED (cleaning mill #1) and three (3) rotoblaster (cleaning mills #3, #5 and #7)] as well as the one (1) electric furnace charge handling operation are in operation and exhausting to the outside atmosphere.

(b) In order to comply with Condition D.3.1(g):

- (1) The three (3) cleaning mills (#3, #5 and #7) may be controlled by either baghouse, known as DC#9 or DC#10, and
- (2) No more than two (2) of the three (3) cleaning mills (#3, #5 or #7) shall be controlled by either DC#9 or DC#10 at anytime.

### **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

#### **D.3.6 Visible Emissions Notations**

- (a) Visible emission notations of the centrifugal casting stack exhausts (Stacks 090a through 090h) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. An observation of an abnormal visible emission notation is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.

#### **D.3.7 Parametric Monitoring**

- (a) The Permittee shall record the total static pressure drop across each of the eight (8) baghouses, known as DC#1, DC#2A, DC#3, DC#4, DC#7 & DC#8, DC#5 and DC#6, controlling the centrifugal casting operations at least once per shift when casting is in operation. When for any one (1) reading, the pressure drop across each of the baghouses is outside the normal range of 2 to 8 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.
- (b) The Permittee shall record the total static pressure drop across each of the three (3) baghouses, known as DC#2, DC#10 and DC#9 controlling the cleaning operations at least once per shift when any shot blaster is in operation. When for any one (1) reading, the pressure

drop across each of the baghouses is outside the normal range of 2 to 8 inches of water for DC#2, DC#10 and DC#9 or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.

- (c) The Permittee shall record the total static pressure drop across the baghouse, known as DC#14, controlling the electric furnace charge handling operation at least once per shift when either of these processes are in operation. When for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 1 to 5 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.
- (d) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every twelve (12) months.

#### D.3.8 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the centrifugal casting operation when venting to the atmosphere. A baghouse inspection shall be performed within three (3) months of redirecting vents to the atmosphere and every three (3) months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### D.3.9 Broken or Failed Bag Detection for Baghouses Without Bag Leak Detection Systems

In the event that bag failure has been observed for the centrifugal casting operations (Unit ID 090) and/or the one (1) electric furnace charge handling operation (Unit ID 070):

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

#### D.3.10 Bag Leak Detection System

The Permittee shall install and operate a continuous bag leak detection system for shot blaster stack exhausts (Stacks 100a through 100c) as well as the one (1) electric furnace charge handling operation stack exhaust (Stack 070a). The bag leak detection system shall meet the following

requirements:

- (a) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.005 grains per actual cubic foot or less.
- (b) The bag leak detection system must be equipped with a signal system that will indicate when an increase in particulate loadings is detected over a preset level.
- (c) The bag leak detection system shall be installed and operated in a manner consistent with the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.
- (d) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the signal set points and the signal delay time.
- (e) In no event shall the sensitivity be increased by more than 100% or decreased by more than 50% over a 365-day period unless such adjustment follows a complete baghouse inspection which demonstrates that the baghouse is in good operating condition.
- (f) The bag detector must be installed downstream of the baghouse.
- (g) In the event that the bag leak detection system should malfunction, fail, or otherwise need repair, the Permittee shall perform visible emission notations of the shot blaster stack exhausts (Stacks 100a through 100c) once per shift during normal daylight operations when exhausting to the atmosphere until such time that the bag leak section system is repaired and functioning properly. A trained employee shall record whether emissions are normal or abnormal. Conditions D.3.6(b) through D.3.6(e) shall also become applicable during any period when visible emission notations are being performed in the alternative of operating the bag leak detection system.
- (h) In the event that the bag leak detection system should malfunction, fail, or otherwise need repair, the Permittee shall perform visible emission notations of the one (1) electric furnace charge handling operation stack exhaust (Stack 070a) once per shift during normal daylight operations when exhausting to the atmosphere until such time that the bag leak section system is repaired and functioning properly. A trained employee shall record whether emissions are normal or abnormal. Conditions D.3.6(b) through D.3.6(e) shall also become applicable during any period when visible emission notations are being performed in the alternative of operating the bag leak detection system.
- (i) The bag leak detection system shall be calibrated at least once per year.

D.3.11 Activated Bag Leak Detection System Signal

In the event that the bag leak detection system signal is activated, the Permittee shall immediately confirm whether or not the signal has been activated by a leak as follows:

- (a) The Permittee shall remove and examine the probe and then re-insert it. If the signal is erroneous, the bag leak detection system shall be reset.
- (b) If the signal is confirmed, the Permittee shall proceed as indicated in Condition D.3.9(a) for multi-compartment units or Condition D.3.9(b) for single compartment baghouses.
  - (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may con-

tinue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.

- (2) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

#### **Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

##### **D.3.12 Record Keeping Requirements**

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- (a) To document compliance with Condition D.3.6,
  - (1) The Permittee shall maintain records of visible emission notations of the centrifugal casting exhausts once per shift.
  - (2) The Permittee shall maintain records of visible emission notations of the cleaning mills #1, #3, #5 and #7 (Stacks 100a - 100c) exhausts once per shift when the applicable bag leak detection system malfunctions, fails, or otherwise needs repair.
  - (3) The Permittee shall maintain records of visible emission notations of the one (1) electric furnace charge handling operation (Stack 070a) exhaust once per shift when the applicable bag leak detection system malfunctions, fails, or otherwise needs repair.
- (b) To document compliance with Condition D.3.7, the Permittee shall maintain records of the inlet and outlet differential static pressure during normal operation when venting to the atmosphere once per shift.
- (c) To document compliance with Condition D.3.8, the Permittee shall maintain records of the results of the inspections required under Condition D.3.8 and the dates the vents are re-directed.
- (d) To document compliance with Condition D.3.11, the Permittee shall maintain records of the occurrences of all bag leak detection system alarms and the response steps.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## SECTION D.4

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)] Insignificant Activities

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. (326 IAC 8-3-2 and 326 IAC 8-3-5)
- (b) Any of the following structural steel and bridge fabrication activities: Cutting 200,000 linear feet or less of one inch (1") plate or equivalent; using 80 tons or less of welding consumables. (326 IAC 6-1)
- (c) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone. (326 IAC 6-1)
- (d) Conveyors as follows: Covered conveyors for coal or coke conveying of less than or equal to 360 tons per day; Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983. (326 IAC 6-1)
- (e) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; and pneumatic conveying operations including the following:
  - One (1) wet liner machining lathing operation controlled by a baghouse dust collector with a gas flow rate of 2,000 actual cubic feet per minute. (326 IAC 6-1)
- (f) Iron manganese phosphating operation (Lubrite). (326 IAC 6-1)
- (g) One (1) CNC lathe machining operation, equipped with a baghouse, known as DC#12. (326 IAC 6-1)

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations construction after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste

solvent (by weight) can evaporate into the atmosphere.

**D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5(a) and (b)]**

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility construction of which commenced after July 1, 1990 shall ensure that the following control equipment requirements are met:
- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
    - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
    - (B) The solvent is agitated; or
    - (C) The solvent is heated.
  - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
  - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
  - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
  - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
    - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
    - (B) A water cover when solvent used is insoluble in, and heavier than, water.
    - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990 shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.

- (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
- (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

**D.4.3 Particulate Matter (PM) [326 IAC 6-1]**

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Pursuant to 326 IAC 6-1 (Nonattainment Area Limitations), the allowable PM emission rate from the trimming, grinding and machining operations shall not exceed a grain loading of 0.03 grains per dry standard cubic foot of exhaust air.

## SECTION D.5

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Entire Source

Including emission units listed in Condition A.3 and insignificant activities listed in Condition A.4

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.5.1 Hazardous Air Pollutants (HAPs) Limitations [Section 112(j) of the Clean Air Act (40 CFR 63.50 - 63.56)]

The total hazardous air pollutant emissions from the entire source, including insignificant activities, shall be less than:

- (a) ten (10) tons of any single HAP per twelve (12) consecutive month period with compliance determined at the end of each month, and
- (b) a total of twenty-five (25.0) tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Compliance with these HAPs emission limitations for the entire source makes the requirements of Section 112(j) of the Clean Air Act (40 CFR 63.50 - 63.56) not applicable.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Richmond Liner Foundry and Machining Plant, Perfect Circle Division, Dana Corporation  
Source Address: 2153 and 2175 Williamsburg Pike, Richmond, Indiana 47375  
Mailing Address: P.O. Box 1446, Richmond, Indiana 47375  
Part 70 Permit No.: T 177-6887-00004

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT  
QUARTERLY DEVIATION and COMPLIANCE MONITORING REPORT**

Source Name: Richmond Liner Foundry and Machining Plant, Perfect Circle Division, Dana Corporation  
Source Address: 2153 and 2175 Williamsburg Pike, Richmond, Indiana 47375  
Mailing Address: P.O. Box 1446, Richmond, Indiana 47375  
Part 70 Permit No.: T 177-6887-00004

Months: \_\_\_\_\_ to \_\_\_\_\_ Year: \_\_\_\_\_

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

**Permit Requirement** specify permit condition #

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

**Permit Requirement** specify permit condition #

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

<b>Permit Requirement</b> specify permit condition #	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

<b>Permit Requirement</b> specify permit condition #	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

<b>Permit Requirement</b> specify permit condition #	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: Richmond Liner Foundry and Machining Plant, Perfect Circle Division, Dana Corporation  
Source Address: 2153 and 2175 Williamsburg Pike, Richmond, Indiana 47375  
Mailing Address: P.O. Box 1446, Richmond, Indiana 47375  
Part 70 Permit No.: T 177-6887-00004

**This form consists of 2 pages**

**Page 1 of 2**

- 9** This is an emergency as defined in 326 IAC 2-7-1(12)  
CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and  
CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

Source Name: Richmond Liner Foundry and Machining Plant, Perfect Circle Division, Dana Corporation  
Source Address: 2153 and 2175 Williamsburg Pike, Richmond, Indiana 47375  
Mailing Address: P.O. Box 1446, Richmond, Indiana 47375  
Part 70 Permit No.: T 177-6887-00004  
Facility: Electric Induction Melting Furnace (Unit ID 021)  
Parameter: Metal Charged  
Limit: 31,392 tons of metal charged per twelve (12) consecutive month period, equivalent to PM<sub>10</sub> emissions of 13.5 tons per year.

YEAR: \_\_\_\_\_

Month	Metal Charged (tons)	Metal Charged (tons)	Metal Charged (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document for a Minor Permit Modification to a Part 70 Operating Permit

**Source Name:** Richmond Liner Foundry and Machining Plant, Perfect Circle Division, Dana Corporation  
**Source Location:** 2153 and 2175 Williamsburg Pike, Richmond, Indiana 47375  
**County:** Wayne  
**Operation Permit No.:** T 177-6887-00090  
**Minor Permit Modification No.:** 177-16144-00090  
**SIC Code:** 3321  
**Permit Reviewer:** Mark L. Kramer

On December 31, 2002, the Office of Air Quality (OAQ) had a notice published in the Palladium Item, Richmond, Indiana, stating that Richmond Liner Foundry and Machining Plant, Perfect Circle Division, Dana Corporation had applied for a Minor Permit Modification to a Part 70 Operating Permit for the addition of a baghouse with bag leak detection for the electric charge handling operation and the scrap pre-heater and incorporation of overall HAPs emission limitations. The notice also stated that OAQ proposed to issue a Significant Permit Modification and provided information on how the public could review the proposed Significant Permit Modification and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Significant Permit Modification to a Part 70 Operating Permit should be issued as proposed.

On February 20, 2003, Mary Ann Saggese, Esq of Plews Lews Shadley Racher & Braun on behalf of Richmond Liner Foundry and Machining Plant, Perfect Circle Division, Dana Corporation submitted comments on the proposed Minor Permit Modification to a Part 70 Operating Permit. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

#### Comment 1:

Dana Corporation requests revisions to the proposed First Minor Permit Modification since Dana intends for the existing Dust Collector, DC#13 to remain on the direct-fired charge pre-heater, Unit ID 080 (item (j)), and for the new Dust Collector DC#14 to be installed solely on the electric furnace charge handling operation, Unit ID 070 (item (i)). Accordingly, all references to the two operations being joined on DC#14 should be deleted and the former permit language referring to DC#13 on the pre-heater should be reinstated. DC#13 has no leak detection system and the emission unit description included a statement that the "baghouse does not have to be operated at all times" that the preheater is operating. The following conditions require revision: A.3(j), D.3(j), D.3.1(d), D.3.3, D.3.5(a), D.3.7(c), D.3.9, D.3.10, D.3.12(a)(3), and the TSD for the Minor Permit Modification consistent with the noted conditions.

Also since the source has taken a limit on HAPs to keep it a minor source of HAPs, Condition A.1 needs to be updated.

#### Response 1:

Although IDEM, OAQ was verbally informed by the consultant for Richmond Liner Foundry and Machining Plant, Perfect Circle Division, Dana Corporation on October 17, 2002 that baghouse

DC#14 would also be connected to the direct-fired charge pre-heater, Unit ID 080, the source has now indicated that the proposed baghouse DC#14 will only service the electric furnace charge handling operation, Unit ID 070. Therefore, the following changes have been made to rectify the assignment of baghouses and return the Part 70 Permit for DC#13 to its original status with no leak detection system as follows.

Also since the source has taken a limit on HAPs to keep it a minor source of HAPs, Condition A.1 has been updated.

Note this Addendum also serves as the documentation of the changes to the Technical Support Document.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

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The Permittee owns and operates a stationary grey and ductile iron sleeve casting and machining source, consisting of two (2) plants designated as Plants 1 and 2.

Responsible Official:	Tim Boncher, or the person holding the title of Plant Manager or the Richmond Machine Plant Manager or the acting Richmond Machine Plant Manager
Source Address:	2153 and 2175 Williamsburg Pike, Richmond, Indiana 47375
Mailing Address:	P.O. Box 1446, Richmond, Indiana 47375
General Source Phone Number:	317-935-7800
SIC Code:	3321, 3398 and 3592
County Location:	Wayne
Source Location Status:	
Attainment for all criteria pollutants	
Source Status:	Part 70 Permit Program Major Source, under PSD rules <b>Minor</b> <del>Major</del> Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
[326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (j) One (1) direct-fired scrap charge pre-heater, known as Unit ID 080, ~~installed in 1972,~~ equipped with a baghouse, known as Unit ID DC#134, ~~with a leak detection system,~~ ~~installed in 2002,~~ exhausted through Stack 070a13, **installed in 1972**, capacity: 10 tons of metal per hour **(baghouse does not have to be operated at all times)**.

## SECTION D.3 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (j) One (1) direct-fired scrap charge pre-heater, known as Unit ID 080, ~~installed in 1972, equipped with a baghouse, known as Unit ID DC#134, with a leak detection system, installed in 2002, exhausted through Stack 070a13, installed in 1972, capacity: 10 tons of metal per hour~~ **(baghouse does not have to be operated at all times).**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.3.1 Particulate Matter (PM) [326 IAC 6-1]

- (d) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from one (1) electric furnace charge handling operation (Unit ID 070) ~~and the direct-fired scrap charge pre-heater (Unit ID 080)~~ shall not exceed 0.03 grains per dry standard cubic foot, equivalent to 15.4 pounds per hour at a flow rate of 59,870 dry standard cubic feet per minute.
- (e) **Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the direct-fired scrap charge pre-heater (Unit ID 080) shall not exceed 0.03 grains per dry standard cubic foot, equivalent to 4.38 pounds per hour at a flow rate of 17,035 dry standard cubic feet per minute.**
- (ef) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the twelve (12) centrifugal casting operations (Unit ID 090) consisting of four (4) long tube spinners (Group 1), thirty-three (33) regular spinners (Groups 3 through Group 6 and Group 8) and four (4) long tube spinners (Group 4) and one (1) rotary turntable (Group 7), shall not exceed 0.03 grains per dry standard cubic foot each for Stacks 090a through 090h, equivalent to 4.77, 0.835, 0.740, 0.740, 0.835, 0.740, 0.740 and 0.883 pounds per hour at flow rates of 18,555, 3,247, 2,876, 2,876, 3,247, 2,876, 2,876 and 3,433 dry standard cubic feet per minute for Stacks 090a through 090h, respectively.
- (fg) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the four (4) shot blasters [one (1) hanging conveyORIZED (cleaning mill #1) and three (3) rotoblasts (cleaning mills #3, #5 and #7)] (Unit ID 100) shall not exceed 0.03 grains per dry standard cubic foot, each, equivalent to:
- (1) 3.96 pounds per hour at a flow rate of 15,394 dry standard cubic feet per minute each for Stacks 100a and 100b, and
  - (2) 1.98 pounds per hour at a flow rate of 7,697 dry standard cubic feet per minute for Stack 100c.

#### D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for baghouses DC#1, #2, #2A, #3, #4, #5, #6, #7, #8, #9, #10 and #14 associated with the twelve (12) centrifugal casting operations, known as Unit ID 090 and the four (4) shot

blastors [one (1) hanging conveyORIZED (cleaning mill #1), and three (3) rotoblasts (cleaning mill #3, #5 and #7)], known as Unit ID 100, **and** the one (1) electric furnace charge handling operation, known as Unit ID 070 ~~and the direct-fired scrap charge pre-heater, known as Unit ID 080.~~

#### Compliance Determination Requirements

##### D.3.5 Particulate Matter (PM)

- (a) In order to comply with Condition D.3.1, the seven (7) baghouses, known as DC#1, DC#2A, DC#3, DC#4, and DC#7 & DC#8, two (2) baghouses, known as DC#5 & DC#6, and/or the three (3) baghouses, known as DC#2, DC#10 and DC#9 as well as DC#14 for PM control shall be in operation at all times when the twelve (12) centrifugal casting operations, the one (1) rotary turntable (Group 7) and/or four (4) shot blastors [one (1) hanging conveyORIZED (cleaning mill #1) and three (3) rotoblasts (cleaning mills #3, #5 and #7)] as well as the one (1) electric furnace charge handling operation ~~and the direct-fired scrap charge pre-heater~~ are in operation and exhausting to the outside atmosphere.
- (b) In order to comply with Condition D.3.1(g):
- (1) The three (3) cleaning mills (#3, #5 and #7) may be controlled by either baghouse, known as DC#9 or DC#10, and
  - (2) No more than two (2) of the three (3) cleaning mills (#3, #5 or #7) shall be controlled by either DC#9 or DC#10 at anytime.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

##### D.3.7 Parametric Monitoring

- (c) The Permittee shall record the total static pressure drop across the baghouse, known as DC#14, controlling the electric furnace charge handling operation ~~and the direct-fired scrap charge pre-heater~~ at least once per shift when either of these processes are in operation. When for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 1 to 5 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.

##### D.3.9 Broken or Failed Bag Detection for Baghouses Without Bag Leak Detection Systems

In the event that bag failure has been observed for the centrifugal casting operations (Unit ID 090) and/or the one (1) electric furnace charge handling operation (Unit ID 070) ~~and the direct-fired scrap charge pre-heater (Unit ID 080):~~

##### D.3.10 Bag Leak Detection System

The Permittee shall install and operate a continuous bag leak detection system for shot blaster stack exhausts (Stacks 100a through 100c) as well as the one (1) electric furnace charge handling operation ~~and the direct-fired scrap charge pre-heater~~ stack exhaust (Stack 070a). The bag leak detection system shall meet the following requirements:

- (a) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.005 grains per actual cubic foot or less.
- (b) The bag leak detection system must be equipped with a signal system that will indicate when an increase in particulate loadings is detected over a preset level.
- (c) The bag leak detection system shall be installed and operated in a manner consistent with the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.
- (d) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the signal set points and the signal delay time.
- (e) In no event shall the sensitivity be increased by more than 100% or decreased by more than 50% over a 365-day period unless such adjustment follows a complete baghouse inspection which demonstrates that the baghouse is in good operating condition.
- (f) The bag detector must be installed downstream of the baghouse.
- (g) In the event that the bag leak detection system should malfunction, fail, or otherwise need repair, the Permittee shall perform visible emission notations of the shot blaster stack exhausts (Stacks 100a through 100c) once per shift during normal daylight operations when exhausting to the atmosphere until such time that the bag leak section system is repaired and functioning properly. A trained employee shall record whether emissions are normal or abnormal. Conditions D.3.6(b) through D.3.6(e) shall also become applicable during any period when visible emission notations are being performed in the alternative of operating the bag leak detection system.
- (h) In the event that the bag leak detection system should malfunction, fail, or otherwise need repair, the Permittee shall perform visible emission notations of the one (1) electric furnace charge handling operation ~~and the direct-fired scrap charge pre-heater~~ stack exhaust (Stack 070a) once per shift during normal daylight operations when exhausting to the atmosphere until such time that the bag leak section system is repaired and functioning properly. A trained employee shall record whether emissions are normal or abnormal. Conditions D.3.6(b) through D.3.6(e) shall also become applicable during any period when visible emission notations are being performed in the alternative of operating the bag leak detection system.
- (i) The bag leak detection system shall be calibrated at least once per year.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.12 Record Keeping Requirements

- (a) To document compliance with Condition D.3.6,
  - (1) The Permittee shall maintain records of visible emission notations of the centrifugal casting exhausts once per shift.

- (2) The Permittee shall maintain records of visible emission notations of the cleaning mills #1, #3, #5 and #7 (Stacks 100a - 100c) exhausts once per shift when the applicable bag leak detection system malfunctions, fails, or otherwise needs repair.
- (3) The Permittee shall maintain records of visible emission notations of the one (1) electric furnace charge handling operation ~~and the direct-fired scrap charge pre-heater~~ (Stack 070a) exhaust once per shift when the applicable bag leak detection system malfunctions, fails, or otherwise needs repair.

Upon further review, the OAQ has decided to make the following changes to the Significant Permit Modification to a Part 70 Operating Permit: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

**Change 1:**

The redundant wording in Condition D.5.1(b) has been deleted as follows:

**D.5.1 Hazardous Air Pollutants (HAPs) Limitations [Section 112(j) of the Clean Air Act (40 CFR 63.50 - 63.56)]**

The total hazardous air pollutant emissions from the entire source, including insignificant activities, shall be less than:

- (a) ten (10) tons of any single HAP per twelve (12) consecutive month period with compliance determined at the end of each month, and
- (b) a total of twenty-five (25.0) tons per twelve (12) consecutive month period ~~tons per twelve (12) consecutive month period~~ with compliance determined at the end of each month.

Compliance with these HAPs emission limitations for the entire source makes the requirements of Section 112(j) of the Clean Air Act (40 CFR 63.50 - 63.56) not applicable.

## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for a Part 70 Minor Permit Modification

#### Source Background and Description

<b>Source Name:</b>	<b>Richmond Liner Foundry and Machining Plant, Perfect Circle Division, Dana Corporation</b>
<b>Source Location:</b>	<b>2153 and 2175 Williamsburg Pike, Richmond, Indiana 47375</b>
<b>County:</b>	<b>Wayne</b>
<b>SIC Code:</b>	<b>3321</b>
<b>Operation Permit No.:</b>	<b>T 177-6887-00090</b>
<b>Operation Permit Issuance Date:</b>	<b>June 28, 2002</b>
<b>Minor Permit Modification No.:</b>	<b>177-16144-00090</b>
<b>Permit Reviewer:</b>	<b>Mark L. Kramer</b>

The Office of Air Quality (OAQ) has reviewed a modification application from Richmond Liner Foundry and Machining Plant, Perfect Circle Division, Dana Corporation relating to the installation of a baghouse with a bag leak detection system for particulate matter control at the existing electric furnace charge handling operation and scrap charge pre-heater as follows:

- (a) One (1) electric furnace charge handling operation, known as Unit ID 070, installed in 1972, equipped with a baghouse, known as DC#14, equipped with a bag leak detection system, installed in 2002, exhausted through Stack 070a, capacity: 10 tons of metal per hour.
- (b) One (1) direct-fired scrap charge pre-heater, known as Unit ID 080, installed in 1972, equipped with a baghouse, known as DC#14, equipped with a bag leak detection system, installed in 2002, exhausted through Stack 070a, capacity: 10 tons of metal per hour.

#### History

On September 23, 2002, Richmond Liner Foundry and Machining Plant, Perfect Circle Division, Dana Corporation submitted an application to the OAQ requesting to add a control device to the existing permitted electric furnace charge handling operation. This proposed baghouse will also replace the existing baghouse, DC#13, connected to the direct-fired scrap charge pre-heater. Richmond Liner Foundry and Machining Plant, Perfect Circle Division, Dana Corporation was issued a Part 70 Operating Permit on June 28, 2002. There is no other change in the charge handling operation or the scrap pre-heater and therefore, there is no increase in the potential to emit any of the regulated pollutants. The source also applied for an Interim Construction Permit 177-16144I-00090 on September 23, 2002.

In addition, in correspondence dated October 15, 2002, Richmond Liner Foundry and Machining Plant, Perfect Circle Division, Dana Corporation, requested that federally enforceable limits be incorporated into their Part 70 Operating Permit to the potential to emit HAPs to render the requirements of 112(j) MACT Hammer, not applicable.

### Source Definition

This iron sleeve casting and machining source consists of two (2) plants:

- (a) Plant 1 is located at 2153 Williamsburg Pike; Richmond, Indiana (177-00004), and
- (b) Plant 2 is located at 2175 Williamsburg Pike, Richmond, Indiana (177-00013).

Since these two (2) plants are located on contiguous properties, are owned by one (1) company, and together produce products for shipment to their customers, they were considered one (1) source located at 2153 and 2175 Williamsburg Pike, Richmond, Indiana pursuant to 177-11453-00090, issued on November 17, 1999. The individual plant identification numbers of 00004 and 00013 have been replaced by the combined plant identification number of 00090. The source and OAQ inspector assigned to the source have been informed of this source evaluation.

### Enforcement Issue

There are no enforcement actions pending.

### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
070a	Electric Furnace Charge Handling (070) & Scrap Charge Pre- Heater (080) Baghouse DC#14	40.0	4.3	61,000	100

### Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 23, 2002 with additional information received on October 18, 2002.

### Emission Calculations

See page 1 of 1 of Appendix A of this document for detailed emissions calculations to show compliance with 326 IAC 6-1.

### Justification for Modification

The Part 70 Operating Permit is being modified through a Part 70 Minor Permit Modification in accordance with 326 IAC 2-7-12(b)(1)(B). The Minor Permit Modification will give the source approval to operate the proposed baghouse with its compliance monitoring conditions.

### County Attainment Status

The source is located in Wayne County.

Pollutant	Status
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Wayne County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Wayne County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions  
 Since this type of operation is one of the 28 listed source categories under 326 IAC 2-2, the fugitive PM emissions are counted toward determination of PSD and Emission Offset applicability.

### Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	287
PM <sub>10</sub>	235
SO <sub>2</sub>	71.4
VOC	12.5
CO	848
NO <sub>x</sub>	61.4

- (a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of one hundred (100) tons per year or more, and it is one of the 28 listed source categories.

- (b) These emissions are based upon the Appendix B of the Addendum to the TSD for the Part 70 Operating Permit T 177-6887-00090, issued June 28, 2002.

### Potential to Emit of Modification of Adding a Baghouse After Issuance

The table below summarizes the potential to emit, reflecting all limits, of emission units Unit ID 070 and Unit ID 080 with and without the proposed baghouse. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Proposed Modification adding baghouse to 070 and 080	4.20 2.10	3.78 2.10					0.000 0.106
<b>Subtotal</b>	<b>6.31</b>	<b>5.89</b>					<b>0.106</b>
Existing 070 and 080 without baghouse	13.1 8.76	15.8 8.76	-	-	-	-	0.000 0.442
<b>Subtotal</b>	<b>21.9</b>	<b>24.6</b>					<b>0.442</b>
<b>Decrease</b>	<b>-15.6</b>	<b>-18.7</b>	-	-	-	-	<b>-0.336</b>

### Potential to Emit of the Entire Source After Issuance

The table below summarizes the revised potential to emit, reflecting all limits, of the significant emission units after controls with DC#14 based on the Appendix B of Addendum to the TSD for T 177-6887-00090.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
010	51.5	51.5	70.1	10.1	813	5.61	5.35
020	41.4	39.6	-	-	-	-	2.22
021	14.1	13.5	-	-	-	-	0.759
030	5.72	5.72	-	-	-	-	0.058
031	1.18	1.18	-	-	-	-	0.012
050	7.66	7.66	-	0.088	-	-	0.078
060	13.5	20.2	-	-	-	-	-
070	<b>4.20</b> 43.4	<b>3.78</b> 45.8	-	-	-	-	-
080	<b>2.10</b> 8.76	<b>2.10</b> 8.76	-	-	-	-	<b>0.106</b> 0.442

	<b>Limited Potential to Emit</b> (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
090	7.45	7.45	-	-	-	-	0.075
100	57.3	6.29	-	-	-	-	0.639
Combustion 010	0.460	0.533	0.616	0.385	5.89	14.6	0.248
Combustion 040	0.402	0.466	0.539	0.337	5.15	12.7	
Fugitives 060 & 070	4.49 4.38	4.49 4.38	-	-	-	-	-
Insignificant Activities Wet Liner Machining/ Lathing	1.95	1.95	-	-	-	-	0.020
Insignificant Activities Natural Gas Combustion	0.543	2.17	0.171	1.57	24.0	28.6	0.787
Dry Lathe Machining Operation	0.002	0.002	-	-	-	-	-
Coke and Stone Conveyor	0.0003	0.0003	-	-	-	-	-
<b>Total Emissions</b>	<b>218.234</b>	<b>177.496</b>	<b>71.4</b>	<b>12.5</b>	<b>848</b>	<b>61.5</b>	<b>9.58992</b>

### State Rule Applicability - Individual Facilities

#### 326 IAC 6-1 (Nonattainment area limitations)

Since this source has a potential PM emission rate that exceeds one hundred (100) tons per year and is located in Wayne County, all facilities are subject to this rule. Any facilities not specifically listed in 326 IAC 6-1-14 are subject to 326 IAC 6-1-2 (a) or (e).

The one (1) electric furnace charge handling operation, known as Unit ID 070, and the one (1) direct-fired scrap charge pre-heater, known as Unit ID 080 at this grey iron foundry are subject to 326 IAC 6-1-2(a) which limits particulate matter emissions to not exceed 0.03 grains per dry standard cubic foot of exhaust air. Page 1 of 1 of Appendix A shows the calculations of the allowable particulate matter emissions of 15.4 pounds per hour as well as the potential to emit after control of 1.44 pounds per hour. Therefore, the two (2) emission units (Unit ID 070 and Unit ID 080) vented to Stack 070a comply with the limit of 0.03 grains per dry standard cubic foot of exhaust air.

### Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the

source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The one (1) electric furnace charge handling operation, known as Unit ID 070, and the one (1) direct-fired scrap charge pre-heater, known as Unit ID 080, equipped with a baghouse, known as DC#14, with a leak detection system, vented to Stack 070a requires compliance monitoring since the allowable PM emission rate exceeds ten (10) pounds per hour with a control device.

The compliance monitoring requirements applicable to the one (1) electric furnace charge handling operation, known as Unit ID 070, and the one (1) direct-fired scrap charge pre-heater, known as Unit ID 080, equipped with a baghouse, known as DC#14, with a leak detection system, vented to Stack 070a have applicable compliance monitoring conditions as specified below:

- (a) The bag leak detection shall meet the following requirements:
  - (1) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.005 grains per actual cubic foot or less.
  - (2) The bag leak detection system must be equipped with a signal system that will indicate when an increase in particulate loadings is detected over a preset level.
  - (3) The bag leak detection system shall be installed and operated in a manner consistent with the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.
  - (3) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the signal set points and the signal delay time.
  - (4) In no event shall the sensitivity be increased by more than 100% or decreased by more than 50% over a 365-day period unless such adjustment follows a complete baghouse inspection which demonstrates that the baghouse is in good operating condition.
  - (5) The bag detector must be installed downstream of the baghouse.
  - (6) In the event that the bag leak detection system should malfunction, fail, or otherwise need repair, the Permittee shall perform visible emission notations of the electric induction furnace charge handling operation and the scrap charge pre-heater exhaust (Stack 070a) once per shift during normal daylight operations when exhausting to the atmosphere until such time that the bag leak section system is repaired and functioning properly. A trained employee shall record whether emis-

sions are normal or abnormal.

- (7) The bag leak detection system shall be calibrated at least once per year.
- (b) In the event that the bag leak detection system signal is activated, the Permittee shall immediately confirm whether or not the signal has been activated by a leak as follows:
  - (1) The Permittee shall remove and examine the probe and then re-insert it. If the signal is erroneous, the bag leak detection system shall be reset.
  - (2) If the signal is confirmed, the Permittee shall proceed as indicated in Condition D.3.9(a) or (b) (Broken or Failed Bag Detection For Baghouse Without Bag Leak Detection Systems) of the Part 70 Operating Permit for multi-compartment units or for single compartment baghouses, respectively.
    - (A) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.
    - (B) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

These monitoring conditions are necessary because the baghouse for the electric induction furnace charge handling operation and the scrap charge pre-heater must operate properly to ensure compliance with 326 IAC 6-1 and 326 IAC 2-7 (Part 70).

### Proposed Changes

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in **bold**):

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]  
[326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (i) One (1) electric furnace charge handling operation, known as Unit ID 070, **installed in 1972, equipped with a baghouse, known as DC#14, with a leak detection system,**

**installed in 2002**, exhausted through Stack 070a, ~~installed in 1972~~, capacity: 10 tons of metal per hour.

- (j) One (1) direct-fired scrap charge pre-heater, known as Unit ID 080, **installed in 1972**, equipped with a baghouse, known as ~~Unit ID DC#143~~, **with a leak detection system, installed in 2002**, exhausted through Stack **070a**~~13~~, ~~installed in 1972~~, capacity: 10 tons of metal per hour (~~baghouse does not have to be operated at all times~~).

## SECTION D.3

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (i) One (1) electric furnace charge handling operation, known as Unit ID 070, **installed in 1972, equipped with a baghouse, known as DC#14, with a leak detection system, installed in 2002**, exhausted through Stack 070a, ~~installed in 1972~~, capacity: 10 tons of metal per hour.
- (j) One (1) direct-fired scrap charge pre-heater, known as Unit ID 080, **installed in 1972**, equipped with a baghouse, known as ~~Unit ID DC#143~~, **with a leak detection system, installed in 2002**, exhausted through Stack **070a**~~13~~, ~~installed in 1972~~, capacity: 10 tons of metal per hour (~~baghouse does not have to be operated at all times~~).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.3.1 Particulate Matter (PM) [326 IAC 6-1]

- (d) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from one (1) electric furnace charge handling operation (Unit ID 070) **and the direct-fired scrap charge pre-heater (Unit ID 080)** shall not exceed 0.03 grains per dry standard cubic foot, equivalent to **15.4** ~~4.95~~ pounds per hour at a flow rate of **59,870** ~~19,243~~ dry standard cubic feet per minute.
- ~~(e) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the direct-fired scrap charge pre-heater (Unit ID 080) shall not exceed 0.03 grains per dry standard cubic foot, equivalent to 4.38 pounds per hour at a flow rate of 17,035 dry standard cubic feet per minute.~~
- (ef) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the twelve (12) centrifugal casting operations (Unit ID 090) consisting of four (4) long tube spinners (Group 1), thirty-three (33) regular spinners (Groups 3 through Group 6 and Group 8) and four (4) long tube spinners (Group 4) and one (1) rotary turntable (Group 7), shall not exceed 0.03 grains per dry standard cubic foot each for Stacks 090a through 090h, equivalent to 4.77, 0.835, 0.740, 0.740, 0.835, 0.740, 0.740 and 0.883 pounds per hour at flow rates of 18,555, 3,247, 2,876, 2,876, 3,247, 2,876, 2,876 and 3,433 dry standard cubic feet per minute for Stacks 090a through 090h, respectively.
- (fg) Pursuant to 326 IAC 6-1-2(a), the particulate matter (PM) emissions from the four (4) shot blasters [one (1) hanging conveyORIZED (cleaning mill #1) and three (3) rotoblaster (cleaning mills #3, #5 and #7)] (Unit ID 100) shall not exceed 0.03 grains per dry standard cubic foot, each, equivalent to:

- (1) 3.96 pounds per hour at a flow rate of 15,394 dry standard cubic feet per minute each for Stacks 100a and 100b, and
- (2) 1.98 pounds per hour at a flow rate of 7,697 dry standard cubic feet per minute for Stack 100c.

#### D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for baghouses DC#1, #2, #2A, #3, #4, #5, #6, #7, #8, #9, ~~and #10~~ **and #14** associated with the twelve (12) centrifugal casting operations, known as Unit ID 090 and the four (4) shot blasters [one (1) hanging conveyorized (cleaning mill #1), ~~and three (3) rotoblaster~~ (cleaning mill #3, #5 and #7)], known as Unit ID 100, **the one (1) electric furnace charge handling operation, known as Unit ID 070 and the direct-fired scrap charge pre-heater, known as Unit ID 080.**

#### Compliance Determination Requirements

#### D.3.5 Particulate Matter (PM)

- (a) In order to comply with Condition D.3.1, the **seven (7) ~~six (6)~~** baghouses, known as DC#1, DC#2A, DC#3, DC#4, and DC#7 & DC#8, two (2) baghouses, known as DC#5 & DC#6, and/or the three (3) baghouses, known as DC#2, DC#10 and DC#9 **as well as DC#14** for PM control shall be in operation at all times when the twelve (12) centrifugal casting operations, the one (1) rotary turntable (Group 7) and/or four (4) shot blasters [one (1) hanging conveyorized (cleaning mill #1) and three (3) rotoblaster (cleaning mills #3, #5 and #7)] **as well as the one (1) electric furnace charge handling operation and the direct-fired scrap charge pre-heater** are in operation and exhausting to the outside atmosphere.
- (b) In order to comply with Condition D.3.1(g):
  - (1) The three (3) cleaning mills (#3, #5 and #7) may be controlled by either baghouse, known as DC#9 or DC#10, and
  - (2) No more than two (2) of the three (3) cleaning mills (#3, #5 or #7) shall be controlled by either DC#9 or DC#10 at anytime.

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.3.7 Parametric Monitoring

- (c) **The Permittee shall record the total static pressure drop across the baghouse, known as DC#14, controlling the electric furnace charge handling operation and the direct-fired scrap charge pre-heater at least once per shift when either of these processes are in operation. When for any one (1) reading, the pressure drop across the baghouse is outside the normal range of 1 to 5 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.**
- (de) The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by

IDEM, OAQ, and shall be calibrated at least once every twelve (12) months.

#### D.3.9 Broken or Failed Bag Detection for Baghouses Without Bag Leak Detection Systems

In the event that bag failure has been observed for the centrifugal casting operations (Unit ID 090) **and/or the one (1) electric furnace charge handling operation (Unit ID 070) and the direct-fired scrap charge pre-heater (Unit ID 080):**

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation of this permit.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the bag-house's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.

#### D.3.10 Bag Leak Detection System

The Permittee shall install and operate a continuous bag leak detection system for shot blaster stack exhausts (Stacks 100a through 100c) **as well as the one (1) electric furnace charge handling operation and the direct-fired scrap charge pre-heater stack exhaust (Stack 070a).** The bag leak detection system shall meet the following requirements:

- (a) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.005 grains per actual cubic foot or less.
- (b) The bag leak detection system must be equipped with a signal system that will indicate when an increase in particulate loadings is detected over a preset level.
- (c) The bag leak detection system shall be installed and operated in a manner consistent with the manufacturer's written specifications and recommendations for installation, operation, and adjustment of the system.
- (d) The initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the signal set points and the signal delay time.
- (e) In no event shall the sensitivity be increased by more than 100% or decreased by more than 50% over a 365-day period unless such adjustment follows a complete baghouse inspection which demonstrates that the baghouse is in good operating condition.
- (f) The bag detector must be installed downstream of the baghouse.

- (g) In the event that the bag leak detection system should malfunction, fail, or otherwise need repair, the Permittee shall perform visible emission notations of the shot blaster stack exhausts (Stacks 100a through 100c) once per shift during normal daylight operations when exhausting to the atmosphere until such time that the bag leak section system is repaired and functioning properly. A trained employee shall record whether emissions are normal or abnormal. Conditions D.3.6(b) through D.3.6(e) shall also become applicable during any period when visible emission notations are being performed in the alternative of operating the bag leak detection system.
- (h) **In the event that the bag leak detection system should malfunction, fail, or otherwise need repair, the Permittee shall perform visible emission notations of the one (1) electric furnace charge handling operation and the direct-fired scrap charge pre-heater stack exhaust (Stack 070a) once per shift during normal daylight operations when exhausting to the atmosphere until such time that the bag leak section system is repaired and functioning properly. A trained employee shall record whether emissions are normal or abnormal. Conditions D.3.6(b) through D.3.6(e) shall also become applicable during any period when visible emission notations are being performed in the alternative of operating the bag leak detection system.**
- (ih) The bag leak detection system shall be calibrated at least once per year.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

#### D.3.12 Record Keeping Requirements

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- (a) To document compliance with Condition D.3.6,
  - (1) The Permittee shall maintain records of visible emission notations of the centrifugal casting exhausts once per shift.
  - (2) The Permittee shall maintain records of visible emission notations of the cleaning mills #1, #3, #5 and #7 (Stacks 100a - 100c) exhausts once per shift when the applicable bag leak detection system malfunctions, fails, or otherwise needs repair.
  - (3) **The Permittee shall maintain records of visible emission notations of the one (1) electric furnace charge handling operation and the direct-fired scrap charge pre-heater (Stack 070a) exhaust once per shift when the applicable bag leak detection system malfunctions, fails, or otherwise needs repair.**

#### A.4 ~~Specifically Regulated~~ Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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This stationary source also includes the following insignificant activities ~~which are specifically regulated~~, as defined in 326 IAC 2-7-1 (21).

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. (326 IAC 8-3-2 and 326 IAC 8-3-5)
- (b) Any of the following structural steel and bridge fabrication activities: Cutting 200,000 linear feet or less of one inch (1") plate or equivalent; using 80 tons or less of welding consumables. (326 IAC 6-1)
- (c) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone. (326 IAC 6-1)

- (d) Conveyors as follows: Covered conveyors for coal or coke conveying of less than or equal to 360 tons per day; Covered conveyors for limestone conveying of less than or equal to 7,200 tons per day for sources other than mineral processing plants constructed after August 31, 1983. (326 IAC 6-1)
- (e) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; and pneumatic conveying operations including the following:
  - One (1) wet liner machining lathing operation controlled by a baghouse dust collector with a gas flow rate of 2,000 actual cubic feet per minute. (326 IAC 6-1)
- (f) Iron manganese phosphating operation (Lubrite). (326 IAC 6-1)
- (g) One (1) CNC lathe machining operation, equipped with a baghouse, known as DC#12. (326 IAC 6-1)
- (h) **Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.**
- (i) **Propane for liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.**
- (j) **Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 British thermal units per hour.**
- (k) **Combustion source flame safety purging on startup.**
- (l) **A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.**
- (m) **The following VOC and HAP storage containers: Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons; vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.**
- (n) **Refractory storage not requiring air pollution control equipment.**
- (o) **Application of oils, greases lubricants or other nonvolatile materials applied as temporary protective coatings.**
- (p) **Machining where an aqueous cutting coolant continuously floods the machining interface.**
- (q) **Closed loop heating and cooling systems.**
- (r) **Groundwater oil recovery wells.**

- (s) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1 percent by volume.
- (t) Any operation using aqueous solutions containing less than 1 percent by weight of VOCs excluding HAPs.
- (u) Noncontact cooling tower systems with the following: Forced and induced draft cooling tower system not regulated under a NESHAP.
- (v) Quenching operations used with heat treating processes.
- (w) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (x) Heat exchanger cleaning and repair.
- (y) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal.
- (z) Paved and unpaved roads and parking lots with public access.
- (aa) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (bb) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (cc) Furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches by volume.
- (dd) On-site fire and emergency response training approved by the department.
- (ee) Emergency generators as follows: Diesel generators not exceeding 1,600 horsepower.
- (ff) Purge double block and bleed valves.
- (gg) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kiloPascals measured at 38EC).
- (hh) A laboratory as defined in 326 IAC IAC 2-7-1(21)(D).
- (ii) Heat treat furnaces and quenching operations; groundwater remediation air stripper; zinc phosphate coating operation; honing washer and honing stone/glue preheater; molybdenum coating spray and blast; parts cleaners - maintenance degreasing; paved roadways; unpaved roadways; storage piles (raw material and solid waste); solid waste landfill; on-site remediation activities.
- (jj) Mold release spray mixing area below 5 pounds per hour and 25 pounds per day of particulate matter.

## **SECTION D.5 FACILITY OPERATION CONDITIONS**

### **Facility Description [326 IAC 2-7-5(15)]: Entire Source**

**Including emission units listed in Condition A.3 and insignificant activities listed in Condition A.4**

**(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)**

### **Emission Limitations and Standards [326 IAC 2-7-5(1)]**

#### **D.5.1 Hazardous Air Pollutants (HAPs) Limitations [Section 112(j) of the Clean Air Act (40 CFR 63.50 - 63.56)]**

**The total hazardous air pollutant emissions from the entire source, including insignificant activities, shall be less than:**

- (a) ten (10) tons of any single HAP per twelve (12) consecutive month period with compliance determined at the end of each month, and**
- (b) a total of twenty-five (25.0) tons per twelve (12) consecutive month period tons per twelve (12) consecutive month period with compliance determined at the end of each month.**

**Compliance with these HAPs emission limitations for the entire source makes the requirements of Section 112(j) of the Clean Air Act (40 CFR 63.50 - 63.56) not applicable.**

### **Conclusion**

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Permit Modification No. 177-16144-00090.

**Company Name:** Richmond Liner Foundry and Machining Plant  
**Address City IN Zip:** 2153 Williamburg Pike, Richmond, IN 47375  
**Minor Permit Modification:** T-177-16144  
**Pit ID:** T-177-00090  
**Reviewer:** Mark L. Kramer  
**Date:** September 23, 2002

**Emission 070**  
**Unit Electric Furnace Charge Handling**

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	DC #14 Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	10	0.4	4.00	17.52	76.00%	0.960	4.20
PM-10	10	0.36	3.60	15.77	76.00%	0.864	3.78

PM and PM-10 emission factors from FIRES, PM adjusted to reflect the fact that Scrap Charge Preheating accounts for 0.2 lb/ton of PM of the emission factor for the combination of handling and preheating. The applicant has requested that a 20% margin of safety be factored into the emission rates. Therefore the control efficiency of 80% has been decreased to 76% or  $(1 - (20\% \cdot 120\%))$

**Emission 080**  
**Unit Scrap Charge Preheater**

Pollutant	Maximum Rate (tons/hr)	Emission Factor (lbs/tons)	Uncontrolled Emission Rate (lbs/hr)	Uncontrolled Emission Rate (tons/yr)	DC #14 Control Efficiency (%)	Controlled Emission Rate (lbs/hr)	Controlled Emission Rate (tons/yr)
PM	10	0.2	2.00	8.76	76.00%	0.480	2.1024
PM-10	10	0.2	2.00	8.76	76.00%	0.480	2.1024
Lead	10	0.0101	0.10	0.442	76.00%	0.024	0.106
<b>Total</b>							
PM			6.00	<b>26.28</b>		1.440	<b>6.307</b>
PM-10			5.60	<b>24.53</b>		1.344	<b>5.887</b>
Lead			0.101	<b>0.442</b>		0.024	<b>0.106</b>

**METHODOLOGY**

Controlled Emission Rate (lbs/hr) = Uncontrolled Emission Rate (lbs/hr) x (1 - Control Efficiency)

Controlled Emission Rate (tons/yr) = Controlled Emission Rate (lbs/hr) x 4.38

Allowable								Actual
EU	Stack/Vent	Grain Loading per Dry	Gas or Air		Gas or Air	Allowable	Allowable	Emission Rate
	DC #	Std. Cubic foot of Outlet Air	Flow Rate	Temperature	Flow Rate	Emission Rate	Emission Rate	after Controls
		(g/dscf)	(acfm.)	(F)	(dcfm.)	(lbs/hr)	(tons/yr)	(lbs/hr)
070 & 080	070a/DC #14	0.030	61000.0	80.0	59870.4	15.395	67.43	1.44

Note: Flow rate in dcfm not corrected for moisture content

Emission Rate in lbs/hr (after controls) = (grains/cub. ft) (cub. ft./min.) (60 min/hr) (lb/7000 grains)\*(530/460+T)

Therefore, 070 and 080 comply with the 0.03 grain loading limit of 326 IAC 6-1